State of California Regional Water Quality Control Board San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT December 10, 2003

ITEM: 8

SUBJECT: PUBLIC HEARING: Receive public testimony on a Resolution to

adopt an amendment to the Water Quality Control Plan for the San Diego Region to incorporate a **Total Maximum Daily Load** (**TMDL**) **for Dissolved Copper in Shelter Island Yacht Basin, San Diego Bay**. The Regional Board will conduct the Public Hearing today, but will take no action. The Regional Board will consider adoption of Tentative Resolution No. 2004-0002 no

earlier than February 2004. (Lesley Dobalian and Christina Arias)

PURPOSE: To conduct a Public Hearing to receive public testimony on a
Resolution to adopt an amendment to the Water Quality Control
Plan for the San Diego Region (Basin Plan) to incorporate a Total
Maximum Daily Load (TMDL) for dissolved copper in the Shelter

Island Yacht Basin portion of San Diego Bay.

PUBLIC NOTICE: The combined Public Hearing Notice and CEQA Notice of Filing was published on October 18, 2003 in the San Diego Union Tribune, Orange County Register and Riverside Press Enterprise and was sent to an extensive interested parties list on October 24, 2003 and the full Regional Board agenda mailing list on October 27, 2003. These Public Notices and all proposed TMDL Basin Plan amendment documents (dated October 24, 2003) have been available on the Regional Board web site and at the Regional Board office for public review since October 24, 2003. The electronic interested parties list recipients also received a direct electronic link to the proposed TMDL documents on October 24, 2003. Together these actions fully satisfy the 45-day public noticing and draft document availability requirements pursuant to Title 40, Section 25.5 of the Code of Federal Regulations (40 CFR 25.5) and state CEQA regulations (23 California Code of Regulations Section 3777).

Three Public Workshops have been conducted (and properly noticed) on the proposed Basin Plan amendment. An initial workshop was conducted on May 17, 2000; a combined Public Workshop/CEQA scoping meeting was conducted on March 19, 2003; and a workshop to present and discuss the October 24, 2003 draft documents was conducted on November 20, 2003.

DISCUSSION:

Background

Shelter Island Yacht Basin (SIYB) is a popular recreational marina located at the north end of San Diego Bay. It is a semi-enclosed marina that supports a high density of recreational vessels (approximately 2200) in an area of low tidal flushing. Recreational vessels at SIYB are typically painted with copper antifouling paints to slow down the buildup of marine organisms on the vessels' hulls. The copper in antifouling paints is designed to discourage marine fouling by leaching into the environment in a process known as passive leaching. At relatively low concentration levels, copper is toxic to a wide range of aquatic organisms, not just fouling organisms, and is persistent in the environment. Specifically, copper is known to adversely affect the early growth and reproductive stages of many marine organisms including fish, bivalves and echinoderms, and is particularly toxic to phytoplankton and zooplankton (essential components in the marine food chain and ecosystem). For these reasons, copper is an excellent biocide in antifouling paints. High levels of copper in the water column at SIYB are also a concern because copper accumulates in marine sediments and can lead to adverse impacts on aquatic benthic life (organisms that live in or on marine sediments).

A significant body of monitoring data documents that dissolved copper concentrations at SIYB violate the numeric water quality objectives for Copper and the narrative water quality objectives for Toxicity and Pesticides as defined in the Basin Plan. These exceedances impair or threaten the Wildlife Habitat and Marine Habitat beneficial uses of SIYB. Accordingly, the Regional Board placed SIYB on the Clean Water Act section 303(d) list as an impaired waterbody in 1996 due to high concentrations of dissolved copper. Under the conditions that exist in SIYB, the Regional Board is required, pursuant to the Clean Water Act, to calculate and implement a Total Maximum Daily Load (TMDL) to restore the water quality at SIYB (i.e., to meet water quality objectives and protect beneficial uses).

Technical TMDL Report and Implementation Plan

The TMDL source analysis indicates that approximately 98% of all copper loading to SIYB originates from copper antifouling paints applied to the hulls of recreational boats moored in SIYB. Furthermore, in order to meet water quality objectives and restore beneficial uses, a 76% overall reduction in copper loading from antifouling paints to SIYB is required.

Copper antifouling paints are registered pesticides subject to regulation by USEPA, California Department of Pesticide Regulation (CDPR) and the San Diego County Agricultural Commissioner (CAC) pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the California Food and Agriculture Code. The discharge of "residual" copper, i.e., any molecule of copper that does not reach an intended "target" fouling organism, is a "pollutant" under the Clean Water Act and a "waste" under the California Water Code and is subject to regulation by the Regional Board. Specifically, the discharge of residual copper to SIYB from antifouling paints applied to the hulls of recreational boats constitutes a discharge of pollutants to waters of the United States and requires an NPDES permit. Although each individual boat hull is itself a "point source", the marina facilities are "cumulative point sources" of residual copper because they serve to congregate boats in high densities and thereby concentrate the discharge of residual copper to SIYB.

The Regional Board can hold the Port of San Diego, SIYB marina owners/operators, individuals owning boats moored in SIYB, and SIYB hull cleaners accountable for the discharge of residual copper to SIYB. Although the discharge of residual copper emanates directly from the boat hulls and is released during underwater hull cleaning operations, it is more practicable for the Regional Board to regulate the Port of San Diego and SIYB marina owner/operators than to directly regulate the 2200 individual boat owners and numerous hull cleaners in SIYB. The rationale and legal basis for the statements above are provided in the draft TMDL Technical Report (see Supporting Document 3).

Required Actions

In order to implement the TMDL, it is proposed that the Regional Board (1) issue an NPDES permit to the Port of San Diego and SIYB marina owners/operators to mandate compliance with the 76% copper waste load reductions; and (2) continue to pursue regulatory (and possibly legislative) solutions with other governmental agencies having legal authority over the registration, sale, and use of copper antifouling paints in California to address the problem in SIYB.

The dischargers will be responsible for meeting the copper waste load reductions over a staged 17-year compliance schedule. Specifically, the NPDES permit will require the Port of San Diego and SIYB marina owners/operators to use their legal authority (ordinances and conditional lease and license agreements) to require individuals owning boats moored in SIYB and hull cleaners operating in SIYB to gradually reduce their

discharges of copper to SIYB.

Two Regional Board Meeting Process

Regional Board Counsel recommends that this TMDL Basin Plan amendment be adopted pursuant to a two Regional Board meeting process. At today's meeting, it is recommended that the Regional Board conduct the Public Hearing to receive testimony pertaining to the October 24, 2003 public review draft of the SIYB TMDL Basin Plan amendment and supporting documents. At the conclusion of the item today, it is recommended that the Regional Board close the Public Hearing and close the public review and comment period. Upon the close of both, staff will prepare written responses to all public comments received and will revise the tentative Resolution, Basin Plan amendment and supporting documents to reflect public comment and Regional Board direction. At a subsequent Regional Board meeting to be conducted no earlier than February 11, 2004, staff will ask the Regional Board to deliberate on the issue and consider adoption of the revised tentative Resolution and Basin Plan amendment.

Stakeholder Participation

In addition to three Public Workshops and numerous forums in which the SIYB TMDL has been discussed, Regional Board staff also conducted a series of pre-release stakeholder meetings in October 2003. Individual stakeholder meetings were held with the Port of San Diego, the marina owners/operators, representative boat owners and hull cleaners, and the environmental community. Regional Board staff has also consulted with SWRCB, USEPA, CDPR, and CAC throughout the three year development of the TMDL. A copy of the draft TMDL was sent to SWRCB, USEPA and CDPR for review and comment prior to the public release of the draft documents on October 24, 2003. In addition staff personally briefed Kathleen Thuner, the San Diego County Agricultural Commissioner, on the draft TMDL on November 18, 2003.

LEGAL CONCERNS:

(1) Is the discharge of "residual" copper from antifouling paints applied in compliance with FIFRA a "pollutant" under the Clean Water Act and subject to an NPDES permit? (2) Which entities should be held accountable for complying with the copper waste load reductions specified in the TMDL? (3) What regulatory mechanism should the Regional Board use to mandate compliance with the required copper waste load reductions? A comprehensive discussion of each of these issues is included in Sections V, VI,

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and VII of the draft TMDL Technical Report (see Supporting Document 3).

SUPPORTING

DOCUMENTS: 1. Tentative Resolution No. R9-2004-0002

 $2.\ Tentative\ Basin\ Plan\ Amendment\ (Attachment\ A\ to\ Resolution\ No.$

R9-2004-0002)

3. Draft Technical Report entitled Total Maximum Daily Load (TMDL) for Dissolved Copper in the Shelter Island Yacht

Basin, San Diego Bay dated October 24, 2004

4. Notice of Public Workshop/ Notice of Public Hearing and

CEQA Notice of Filing

RECOMMENDATIONS: Receive public testimony. Close the Public Hearing and public

review and comment period. Adopt Tentative Resolution No. 2004-0002 at a subsequent Regional Board meeting to be held no

earlier than February 11, 2004.